HP Z820 Workstation

Built for high-end computing and visualization. The dual-processor HP Z820 Workstation delivers outstanding performance, award-winning industrial design, and tool-free serviceability in the industry's most expandable chassis. With next generation Intel® Xeon® processors, support for up to 16 processing cores, and the latest professional graphics, you'll tackle even the most demanding projects like never before.

HP recommends Windows® 7.

Unmatched Design. Inside and Out.
With its expandable design, the HP Z820 Workstation gives you the confidence to produce your best work.

Designed for a wide-range of needs, the HP Z820 offers enhanced tool-free access and unbelievable power at whisper-quiet levels.

Multitasking Made Easy.
The HP Z820 Workstation employs a variety of Intel® Xeon® E5-2600 processors that enable next generation PCI Express technology. With support for 2 processors, the HP Z820 can operate with up to 16 processing cores, delivering ultimate performance to help you accomplish more every minute.

Featuring the C600 series chipset, LSI SAS 2308 controller, and dual Quick Path Interconnects between the processors, the two work together to help you work more effectively than ever before.

Ultra-Powerful Visuals and High Performance Computing.
Built to support next generation PCIe Gen3 graphics from AMD and NVIDIA, the HP Z820 Workstation currently offers a wide range of cards from Pro 2D to ultra high-end 3D graphics to get the job done.

With dual graphics processor support, the HP Z820 can drive up to 8 displays, giving you the power and space you need to multitask like a pro. Plus, get the highest performing GPU computing solutions available in the Z family, like NVIDIA's Maximus, on the HP Z820.

Space to Fill.
This rackable system provides 7 expansion slots, 7 expansion bays and 4-channel integrated DDR3 memory with 16 slots and support for up to 512GBs.

With USB 3.0 ports on the front and internal to the system, the HP Z820 Workstation offers a variety of storage and I/O options including a wide range of internal HDD/ODD and external SATA devices to increase flexibility.

Complete Peace of Mind.
HP workstations offer optional BFR/PVC-free and ENERGY STAR® qualified configurations featuring 90% efficient power supplies.

All HP Workstations come with a limited 3-year parts, 3-year labor and 3-year onsite service (3/3/3) standard warranty that is extendable up to 5 years.

Everybody On

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SPECIFICATIONS

Form Factor	Rackable minitower
Operating system	Genuine Windows® 7 Ultimate 64 Genuine Windows® 7 Professional 32 Genuine Windows® 7 Professional 64 Red Hat Enterprise Linux (drop-in-the-box only) HP Installer Kit for Linux HP Linux Installer Kit includes drivers for both 32-bit & 64-bit OS versions of Red Hat Enterprise Linux WS5 and WS6 and SUSE Linux Enterprise Desktop 11 64-bit. Red Hat Enterprise Linux: Software is not loaded on hard drive. URL and software license number for downloading latest version is included in box.
Processor	Intel® Xeon® E5-2690 (2.90 GHz, 20 MB cache, 8 cores); Intel® Xeon® E5-2687W (3.10 GHz, 20 MB cache, 8 cores); Intel® Xeon® E5-2680 (2.70 GHz, 20 MB cache, 8 cores); Intel® Xeon® E5-2670 (2.60 GHz, 20 MB cache, 8 cores); Intel® Xeon® E5-2667 (2.90 GHz, 15 MB cache, 6 cores); Intel® Xeon® E5-2665 (2.40 GHz, 20 MB cache, 8 cores); Intel® Xeon® E5-2660 (2.20 GHz, 20 MB cache, 8 cores); Intel® Xeon® E5-2650 (2.00 GHz, 20 MB cache, 8 cores); Intel® Xeon® E5-2643 (3.30 GHz, 10 MB cache, 4 cores); Intel® Xeon® E5-2640 (2.50 GHz, 15 MB cache, 6 cores); Intel® Xeon® E5-2630 (2.30 GHz, 15 MB cache, 6 cores); Intel® Xeon® E5-2620 (2.00 GHz, 15 MB cache, 6 cores); Intel® Xeon® E5-2609 (2.40 GHz, 10 MB cache, 4 cores); Intel® Xeon® E5-2603 (1.80 GHz, 10 MB cache, 4 cores)
Chipset	Intel® C602
Memory	Up to 512 GB 1333 MHz DDR3 Load-reduced SDRAM Up to 256 GB 1600 MHz DDR3 Registered SDRAM Up to 64 GB 1600 MHz DDR3 Unbuffered SDRAM Memory Slots : 16 DIMM Actual memory speed dependent on processor. Registered, unbuffered and load-reduced DIMMS may not be mixed.
Internal Storage	250 GB up to 3 TB SATA (7200 rpm) 300 GB up to 600 GB SAS (10000 rpm) 300 GB up to 600 GB SAS (15000 rpm) 128 GB up to 300 GB SATA Solid State Drive Integrated SATA 6.0 Gb/s; Integrated SATA 3.0 Gb/s; Integrated LSI SAS 2308 Controller; LSI MegaRAID® 9260-8i SAS 6Gb/s ROC RAID Card and iBBU08 Battery Backup Unit (selected models)
Removable media	SATA Blu-ray writer; SATA DVD-ROM; Slim slot-load SATA DVD+/-RW; SATA SuperMulti DVD+/-RW
Graphics	Professional 2D, NVIDIA NVS 300 (512 MB); NVIDIA NVS 310 (512 MB); AMD FirePro 2270 (512 MB) Entry 3D, NVIDIA Quadro 410 (512 MB); NVIDIA Quadro 600 (1 GB); AMD FirePro V3900 (1 GB); AMD FirePro V4900 (1 GB) Midrange 3D, NVIDIA Quadro 2000 (1 GB); AMD FirePro V5900 (2 GB) High-end 3D, AMD FirePro V7900 (2 GB); NVIDIA Quadro 4000 (2 GB); NVIDIA Quadro 5000 (2.5 GB); NVIDIA Quadro 6000 (6 GB)
Audio	Integrated High Definition Realtek ALC262;
Communications	Integrated Intel 82579LM PCIe Dual GbE; Broadcom 5761 NetXtreme Gigabit (selected models); Intel Gigabit CT Desktop (selected models); HP NC360T PCIe dual port Gigabit NIC (selected models)
Ports and Connectors	4 USB 3.0; 5 USB 2.0; 2 IEEE 1394a; 2 microphone; 1 audio line out; 1 headphone; 1 audio line in; 1 serial; 2 PS/2 (keyboard & mouse); 2 RJ-45 to integrated Gigabit LAN; 1 22-in-1 media card reader 6 internal USB 2.0 available by 3 separate 2x5 headers
Security	Cable Lock Support (standard - cable for selected models); Chassis Intrusion Sensor (standard); Serial, Parallel, USB, Audio, Network Enable/Disable (standard); Removable Media Write/Boot Control (standard); Power-On Password (standard); Setup Password (standard); Kensington Cable Lock (selected models)
Dimensions	20.3 x 52.5 x 44.4 cm
Weight	Starting at 19.5 kg Exact weight depends upon configuration.
Energy efficiency compliance	ENERGY STAR® qualified configurations available, EPEAT® registered where applicable/supported. See www.epeat.net for registration status by country.
Power	1125W 90% efficient, wide ranging, active PFC
Expansion solutions	3 PCIe Gen3 x16; 1 PCIe Gen3 x8; 1 PCIe Gen3 x4; 1 PCIe Gen2 x4; 1 PCI; The PCIe x8 connectors are open ended, allowing a PCIe x16 card to be seated in the slot. Three 5.25"Four 3.5"
Warranty	3-year worldwide parts, labour and next business day onsite service Terms and conditions may vary, restrictions apply

For more information, please visit **www.hp.eu/workstations**

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Accessories and Services

NVIDIA Quadro 5000 2.5GB Graphics Card		Transform your entire workflow with the newest NVIDIA Quadro 5000, the first professional graphics solution to integrate high-performance computing with advanced visualization. As the only professional-class GPU to feature the CUDA parallel processing architecture, ECC memory and fast double precision, the Quadro 5000 is designed to run computationally intensive applications such as ray tracing, video processing and computational fluid dynamics. NVIDIA's Quadro 5000 can process an unheard of 1.3 billion triangles per second, shattering previous 3D performance benchmarks. Product number: WS096AA
NVIDIA Quadro 6000 6.0GB Graphics Card		The NVIDIA Quadro 6000, part of the newest NVIDIA® Quadro® professional solutions, is a true technological breakthrough, delivering up to 5X faster performance across a broad range of design, animation and video applications. Built on the innovative NVIDIA Fermi architecture, the latest Quadro offerings are the first professional-class GPUs to integrate high performance computing capabilities with advanced visualization techniques, transforming modern workflows. The result is a visual supercomputer right at your desk, capable of streamlining the way you work every day. With Quadro solutions, your work flows – you can design, iterate and deliver higher quality projects in less time. Product number: WS097AA
HP 300GB SATA X25-M Solid State Drive		Solid State Drives (SSDs) are fast becoming a real force with respect to storage in the computer industry. With no moving parts, storage is no longer bound by mechanical barriers to higher performance. HP SSDs for workstations offer overall performance typcially beyond that of SAS 15k rpm HDDs (Hard Disk Drives). Product number: LZ069AA
HP ZR2740w 27-inch LED Backlit IPS Monitor		The HP ZR2740w 68,6 (27'') LED Backlit IPS Monitor delivers massive 2560 x 1440 resolution, a 16:9 aspect ratio, and 3.7 million pixels in an ultra-modern and sleek design that perfectly complements HP Z Workstations. Product number: XW476A4
5-year Next Business Day Onsite	Care Pack	Receive 5 years of next business day onsite repair from an HP-qualified technician for your computing device, if the issue cannot be solved remotely. Product number: U7944E

For more information, please visit www.hp.eu/hpoptions

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